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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,564	12/17/2001	Takaaki Kutsuna	011709	6229
23850	7590 12/07/2005		EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			ROBERTSON, JEFFREY	
1725 K STREET, NW SUITE 1000		ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20006			1712	
			DATE MAILED: 12/07/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
		10/015,564	KUTSUNA ET AL.				
(	Office Action Summary	Examiner	Art Unit				
		Jeffrey B. Robertson	1712				
The Period for Re	e MAILING DATE of this communication ap	pears on the cover sheet with the c	correspondence address				
	ENED STATUTORY PERIOD FOR REPI	VIS SET TO EXPIRE 3 MONTH	(S) OR THIRTY (30) DAVS				
WHICHE  - Extensions after SIX (6  - If NO perio  - Failure to r  Any reply r	/ER IS LONGER, FROM THE MAILING C of time may be available under the provisions of 37 CFR 1.  MONTHS from the mailing date of this communication. d for reply is specified above, the maximum statutory period eply within the set or extended period for reply will, by statuseceived by the Office later than three months after the mailient term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be tind  will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠ Res	ponsive to communication(s) filed on 22	September 2005.					
·		is action is non-final.					
3)☐ Sin	ce this application is in condition for allowa	ance except for formal matters, pro	osecution as to the merits is				
clos	ed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 49	53 O.G. 213.				
Disposition of	of Claims						
4)⊠ Cla	m(s) <u>24-26 and 28-58</u> is/are pending in th	ne application.					
	Of the above claim(s) is/are withdra						
5)⊠ Cla	m(s) <u>26,28 and 30-58</u> is/are allowed.						
6)⊠ Cla	m(s) <u>24,25 and 29</u> is/are rejected.						
•	m(s) is/are objected to.						
8)LJ Cla	m(s) are subject to restriction and/	or election requirement.					
Application I	Papers						
9) <b>□</b> The	specification is objected to by the Examin	er.					
10)□ The	drawing(s) filed on is/are: a) ac	cepted or b) objected to by the	Examiner.				
	licant may not request that any objection to the	-	\ /				
	lacement drawing sheet(s) including the correct						
11)∟ The	oath or declaration is objected to by the E	examiner. Note the attached Office	Action or form PTO-152.				
Priority unde	r 35 U.S.C. § 119						
12) <u></u> Ackı a) <u></u> A	nowledgment is made of a claim for foreig Ⅱ b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).				
1.	Certified copies of the priority documer	nts have been received.					
2.	2. Certified copies of the priority documents have been received in Application No						
3.			ed in this National Stage				
* 0 4	application from the International Burea						
^ See t	he attached detailed Office action for a lis	t of the certified copies not receive	<b>∌d</b> .				
Attachmant/-)							
Attachment(s)  1) Notice of F	References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO 413)				
2) D Notice of D	raftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
	n Disclosure Statement(s) (PTO-1449 or PTO/SB/08 s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application (PTO-152)				

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### **DETAILED ACTION**

1. The amendment after final submitted August 23, 2005 has been entered in response to applicant's request for continued examination of September 22, 2005.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (3,683,044) in view of JP 08-104738 (see English translation obtained from JPO website).

Regarding claims 24, 25, and 29, Huang et al. disclose a composition for coating comprising an epoxy resin and an amine curing agent, wherein the epoxy resin is an epoxy with a glycidylamine moiety derived from metaxylylenediamine (col.3, line 41-col.4, line 20), and that the epoxy resin can be cured by curing agents customarily used for curing glycidyl compounds (col.4, lines 38-53). Huang et al. do not appear to specifically disclose an amine curing agent that is a reaction product of metaxylylenediamine and a polyfunctional compound having at least one acyl group.

JP '738 discloses curing agents for epoxy resins that are useful for prohibiting corrosion in the resulting coating materials. Paragraph [0001]. In paragraphs [0029] and [0030] of the translation, adducts of metaxylylene and acrylonitrile or methylmethacrylate are taught, which are derivatives of acrylic and methacrylic acid.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the amine curing agent of JP '738 in the composition of Huang et al. because the JP '738 references teaches that using an amine curing agent as claimed results in coatings with the additional benefit of corrosion prevention. Regarding claims 25 and 29, the Huang et al. combination does not disclose gas barrier properties. However, as the combination discloses the same materials as claimed, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the composition of the Huang et al. combination to

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have an at least similar gas barrier property because the materials of the Huang et al. combination discloses at least similar materials, and at least similar materials would have yielded a composition with an at least similar gas barrier property.

## Response to Arguments

6. Applicant's arguments with respect to claims 24, 25, and 29 have been considered but are most in view of the new ground(s) of rejection.

# Allowable Subject Matter

7. Claims 26, 28, and 30-58 are allowed.

### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murai et al. (U.S. Patent No. 4,565,859), Okamura et al. (U.S. Patent No. 4,793,886), Corley et al. (U.S. Patent No. 5,746,935), and Cariblom et al. (U.S. Patent No. 5,840,825) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey B. Robertson Primary Examiner Art Unit 1712 Page 5

**JBR**